



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/995,144

11/27/2001

Stephen G. Dick

I-2-175.1US

9935

24374

7590

10/03/2005

VOLPE AND KOENIG, P.C.

DEPT. ICC

UNITED PLAZA, SUITE 1600

30 SOUTH 17TH STREET

PHILADELPHIA, PA 19103

EXAMINER

WONG, BLANCHE

ART UNIT

PAPER NUMBER

2667

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/995,144

Applicant(s)

DICK, STEPHEN G.

Examiner

Blanche Wong

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 16-18 is/are rejected.
- 7) ☒ Claim(s) 15, 19, 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date Nov'01, Dec'02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Drawings are needed for the method and system of cl. 1 and 17 respectively.

The drawings must show every feature of the invention specified in the claims.

Therefore, a system in which a plurality of UEs communicate with a common station (cl. 1) including a RNC (cl. 3), a system frame format (cl. 1), a code identifier (cl. 1), a parameter DP (cl. 2), a power control parameter R, a memory (cl. 17), a processing circuitry (cl. 17), and a communication method comprising determining the number of successful and failed UE transmission in CUTSs per frame and adjusting one or more communication parameters in response to said determination (cl. 1), among other critical elements of this invention, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. See 37 CFR 1.83(a).

Specification

2. In the abstract, ln. 1, replace "communicate" with – communicates --.

Claim Objections

3. Claim 3 is objected to because of the following informalities: Examiner suggests replacing "the specific channel" in ln. 1 with – the specific uplink channel – in consistent with cl. 1, ln. 4. Appropriate correction is required.

4. Claim 4 is objected to because of the following informalities: Examiner suggests replacing "EU" in ln. 1 with – UE --, and replacing "the parameter DP" in ln. 4 with – DP – in consistent with cl. 2, ln. 3. Appropriate correction is required.

5. Claim 5 is objected to because of the following informalities: Examiner suggests replacing "said parameter" in ln. 3 with – R -- in consistent with cl. 5, ln. 2. Appropriate correction is required.

6. Claims 6,8,10,12 are objected to because of the following informalities: Examiner suggests replacing "the parameter R", all in ln. 3, with – R -- in consistent with cl. 5, ln. 2. Appropriate correction is required.

7. Claims 9,10,12,14 are objected to because of the following informalities: Examiner suggests replacing "the parameter DP", all in ln. 3, with – DP -- in consistent with cl. 2, ln. 3. Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. **Claims 2-3,5-14,16** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to cl. 2, ln. 3, it is unclear what is "a parameter DP" or whether Applicant means – a dynamic persistence parameter (DP) – in cl. 3, ln. 4-5.

With regard to cl. 5, ln. 3, it is unclear what is "a power control parameter R" or whether Applicant means – a power control parameter (R) --.

With regard to cl. 9, ln. 3, it is unclear what is "a parameter DP" or whether Applicant means – a dynamic persistence parameter (DP) – in cl. 10, ln. 4-5 or cl. 12, ln. 3-4.

With regard to cl. 13, ln. 3, it is unclear what is "a parameter DP" or whether Applicant means – a dynamic persistence parameter (DP) – in cl. 14, ln. 4-5.

With regard to cl. 16, ln. 2, it is unclear what is "a power control parameter RACH constant" because R is the power control parameter and a RACH constant is a RACH constant. It follows that it is unclear what is "said parameter RACH constant" in ln. 3 and if the parameter is "constant", then "adjusting" a "constant" does not sense because a constant is a non-adjustable value.

With regard to cl. 16, ln. 6, it is unclear what is "a parameter DP" or whether "a parameter (DP)".

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. **Claims 1,17,18** are rejected under 35 U.S.C. 102(e) as being anticipated by Chuah et al. (U.S. Pat No. 6,674,764).

With regard to cl. 1,17,18, Chuah discloses
determining ("the terminal determines whether the access request was
successfully received by the base station", col. 12, ln. 51-52) the number of successful
("If the access request has been successful ...", col. 12, ln. 55-56) and failed ("if the

request is not successful ... the terminal increments variable no_tx by one", col. 12, ln. 60-61) UE transmission (access request) in CUTSs ("a RACH and a packet transmission channel are formed on a slot-by-slot basis", col. 7, ln. 47-48) per frame; and

adjusting ("the remote terminal selects a preamble [P] ... from class I, the remote terminal selects one time offset [T] ...", col. 12, ln. 40-50) one or more communication parameters (P,T) in response to said determination.

With regard to cl. 17, Chuah further discloses a memory (col 12, ln. 27) for storing the number (no_tx) of successful (what did not failed are successful) and failed ("if the request is not successful ...the terminal increments variable no_tx by one", col. 12, ln. 60-61) UE transmission in CUTSs per frame and processing circuitry (remote terminal processor, col. 12, ln. 38) which determines whether UE transmission in CUTSs succeed or fail, stores determination results as data in the memory and adjusts one or more communication parameters based on the data stored in said memory.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Chuah in view of Froula (Pub No. US2001//0034235).

With regard to cl. 2, Chuah discloses the method of cl. 1. However, Chuah fails to explicitly show broadcasting a parameter upon which the UEs determine an access rate for transmitting in CUTSs; and adjusting the parameter in response to the individual system frame determination.

In an analogous art, Froula discloses
broadcasting a parameter (a base station provides control information to mobile stations, para. [0012]) upon which the UEs determine an access rate (the rate of the access type, para. [0012] and [0014]) for transmitting in CUTSs; and
adjusting (a mobile station for system maintenance may receive higher priority for system access, para [0013]) the parameter (the control information includes a plurality of persistence access control parameters. A base persistence and a persistence modifier; the base persistence value identifies the mobile access overload class of a mobile station and an access restriction level for all access types in each access overload class; the persistence modifier is associated with and identifies the type of mobile access attempted by the mobile station, para. [0013])(each mobile uses the control information to prioritize the mobile station's access attempt, para. [0019]) in response to the individual system (mobile station) frame determinations.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have a parameter to determine an access rate and adjustment accordingly. The suggestion/motivation for doing so would have been to control mobile access to a communication system via an access channel by providing control information to mobile stations. para. [0012]. Therefore, it would have been obvious to combine Froula with Chuah for the benefit of broadcasting a parameter upon which the UEs determine an access rate for transmitting in CUTSs; and adjusting the parameter in

response to the individual system frame determination, to obtain the invention as specified in cl. 2.

14. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Chuah in view of Watanabe (U.S. Pat No. 6,285,662).

With regard to cl. 4, Chuah discloses the method of cl. 1. However, Chuah fails to explicitly show the successful and failed UE transmissions in CUTS is determined for multiple system frames spanning a selected time interval.

In an analogous art, Watanabe discloses successful and failed UE transmission (successful and unsuccessful communication, col. 7, ln. 8) and spanning a selected time interval (a contention window is selected and a packet of data can be transmitted via a random access channel within the contention window, col. 8, ln. 20-24).

At the time of the invention, it would have been obvious to a person of ordinary skills in the art to have a method where the successful and failed UE transmissions in CUTS is determined for multiple system frames spanning a selected time interval. The suggestion/motivation for doing so would have been to provide for a multi-user communication system permitting a plurality of mobile terminals to communicate packet data with the access point. Watanabe, col. 6, ln. 43-45. Therefore, it would have been obvious to combine Watanabe with Chuah for the benefit of a method where the successful and failed UE transmissions in CUTS is determined for multiple system frames spanning a selected time interval and thus a multi-user communication system, to obtain the invention as specified in cl. 4.

Allowable Subject Matter

15. Claims 15,19,20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 571-272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BW

BW
September 6, 2005



CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2667

9/29/05